



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

647.7701
Job Sheet 186053



Part No: 647.7701

Job Qty: 4 ea

DAS
21
9-89

Part Name: Strut Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/9/18

Job Tracking No:

Due Date: 11/23/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV A2 IPP REV:A 12.11.01 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	11/23/18	11/23/18	0.00	0.00	Start Up Large Fab-1		DYC 18-11-14
110	Packaging	4 pcs	11/23/18	11/23/18	0.00	0.00	Packaging1-1		DYC 18-11-14
120	Large Fab	4 pcs	11/23/18	11/23/18	0.00	1.75	Large Fab 4		DYC 18-11-14
130	QC	4 pcs	11/23/18	11/23/18	0.00	0.00	QC9		EL
140	QC	4 pcs	11/23/18	11/23/18	0.00	0.00	QC5		EL
150	Outsource	4 pcs	11/23/18	11/23/18			GRO002-VC	10	18-11-14
160	Packaging	4 pcs	11/23/18	11/23/18	0.00	0.00	Packaging2		NOV 22 2018
170	QC	4 pcs	11/23/18	11/23/18	0.00	0.00	QC5		NOV 22 2018
180	SprayPaint	4 pcs	11/23/18	11/23/18	0.00	0.32	Spray Paint		18-11-14 9-89
190	QC	4 pcs	11/23/18	11/23/18	0.00	0.00	QC14		38
200	Packaging	4 pcs	11/23/18	11/23/18	0.00	0.00	Packaging3-1		DEC 04 2018
210	QC21-SA	4 Ea	11/23/18	11/23/18	0.00	0.00	QC21		DEC 04 2018

Part Op 120 - 1- ASSEMBLE AND WELD AS PER DWG ***IMPORTANT DIMENSION IS 23.75" ***

Descriptions: 150 - Issue P/O 041956 Group Altech CAD PLATE IAW QQ-P-416F CLASS I TYPE II note: cad plate should not be too thick around tread

180 - PRIOR TO PRIME MASK THREAD AND PRIME AS PER DWG PRIMER BATCH: 5094268

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
647.7710	Strut Tube	4 Ea (1 ea)	90-Start up Operation	5021936 (8)
647.7712	Strut Tube	4 Ea (1 ea)	90-Start up Operation	5114663 (1) 5043554 (5)
647.7713	Strut Thread	4 Ea (1 ea)	90-Start up Operation	5063803 (4) 5115328 (2)

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	647.7710	4	6	0
	647.7712	4	21	0
	647.7713	4	20	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																					
Date : _____		Step #: _____		Part: 647.7701 Job No: 186053 Serial No/Batch: S127768 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: _____ Date: 11/14/18																																																																																																																					
Description Work Order Deviation																																																																																																																									
Root Cause <table style="width:100%;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>		Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	<table style="width:100%;"> <tr><td>Pressure/Forced</td><td>☐</td></tr> <tr><td>Bending</td><td>☐</td></tr> <tr><td>Centre Not Concentric</td><td>☐</td></tr> <tr><td>Cracks</td><td>☐</td></tr> <tr><td>Crimp/Kink/Ripple/Wave</td><td>☐</td></tr> <tr><td>Cuffs</td><td>☐</td></tr> <tr><td>Crushing</td><td>☐</td></tr> <tr><td>Heat Treat</td><td>☐</td></tr> <tr><td>Wave/Twist in Tube</td><td>☐</td></tr> <tr><td>Marks/Chatter</td><td>☐</td></tr> </table>		Pressure/Forced	☐	Bending	☐	Centre Not Concentric	☐	Cracks	☐	Crimp/Kink/Ripple/Wave	☐	Cuffs	☐	Crushing	☐	Heat Treat	☐	Wave/Twist in Tube	☐	Marks/Chatter	☐	<table style="width:100%;"> <tr><td>BOIV/Route</td><td>☐</td></tr> <tr><td>Broken/Damage/Defect</td><td>☐</td></tr> <tr><td>Inspection Incomplete/Unqualified</td><td>☐</td></tr> <tr><td>Contamination</td><td>☐</td></tr> <tr><td>Countersink</td><td>☐</td></tr> <tr><td>Cut Too Short</td><td>☐</td></tr> <tr><td>Instructions Incomplete/Unclear</td><td>☐</td></tr> <tr><td>Drill Holes</td><td>☐</td></tr> </table>		BOIV/Route	☐	Broken/Damage/Defect	☐	Inspection Incomplete/Unqualified	☐	Contamination	☐	Countersink	☐	Cut Too Short	☐	Instructions Incomplete/Unclear	☐	Drill Holes	☐	<table style="width:100%;"> <tr><td>Weld</td><td>☐</td></tr> <tr><td>Wrong Stock Pulled</td><td>☐</td></tr> <tr><td>Out of Sequence</td><td>☐</td></tr> <tr><td>Off-set</td><td>☐</td></tr> <tr><td>Mislabeled</td><td>☐</td></tr> <tr><td>Fit/Function</td><td>☐</td></tr> <tr><td>Misaligned/off center</td><td>☐</td></tr> </table>		Weld	☐	Wrong Stock Pulled	☐	Out of Sequence	☐	Off-set	☐	Mislabeled	☐	Fit/Function	☐	Misaligned/off center	☐	<table style="width:100%;"> <tr><td>Part Incorrect</td><td>☐</td></tr> <tr><td>Part Lost/Missing</td><td>☐</td></tr> <tr><td>Part Moved</td><td>☐</td></tr> <tr><td>Drawing</td><td>☐</td></tr> <tr><td>Finish</td><td>☐</td></tr> <tr><td>Misread</td><td>☐</td></tr> <tr><td>Turning Sequence</td><td>☐</td></tr> </table>		Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence	☐
Environment	☐	No Re-verification	☐																																																																																																																						
Design	☐	Operator	☐																																																																																																																						
Doc/Data	☐	Offset/Setup	☐																																																																																																																						
Equip/Tooling	☐	Supplier	☐																																																																																																																						
Handling/Pre	☐	Training	☐																																																																																																																						
Material	☐	Use for Testing	☐																																																																																																																						
Internal Transport	☐	Poor Information	☐																																																																																																																						
Tribal Knowledge	☐	Rushing	☐																																																																																																																						
LOA	☐	Product Improvement	☐																																																																																																																						
Substation	☐	Process Improvement	☐																																																																																																																						
Past Expiry Date	☐	Manufacturing Process	☐																																																																																																																						
Misidentified	☐	Past Due	☐																																																																																																																						
Pressure/Forced	☐																																																																																																																								
Bending	☐																																																																																																																								
Centre Not Concentric	☐																																																																																																																								
Cracks	☐																																																																																																																								
Crimp/Kink/Ripple/Wave	☐																																																																																																																								
Cuffs	☐																																																																																																																								
Crushing	☐																																																																																																																								
Heat Treat	☐																																																																																																																								
Wave/Twist in Tube	☐																																																																																																																								
Marks/Chatter	☐																																																																																																																								
BOIV/Route	☐																																																																																																																								
Broken/Damage/Defect	☐																																																																																																																								
Inspection Incomplete/Unqualified	☐																																																																																																																								
Contamination	☐																																																																																																																								
Countersink	☐																																																																																																																								
Cut Too Short	☐																																																																																																																								
Instructions Incomplete/Unclear	☐																																																																																																																								
Drill Holes	☐																																																																																																																								
Weld	☐																																																																																																																								
Wrong Stock Pulled	☐																																																																																																																								
Out of Sequence	☐																																																																																																																								
Off-set	☐																																																																																																																								
Mislabeled	☐																																																																																																																								
Fit/Function	☐																																																																																																																								
Misaligned/off center	☐																																																																																																																								
Part Incorrect	☐																																																																																																																								
Part Lost/Missing	☐																																																																																																																								
Part Moved	☐																																																																																																																								
Drawing	☐																																																																																																																								
Finish	☐																																																																																																																								
Misread	☐																																																																																																																								
Turning Sequence	☐																																																																																																																								
		OTHER : _____																																																																																																																							



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041756**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041756
PO Date: 11/16/18
Due Date: 11/23/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments: ** need back by Wednesday/Thursday, Please confirm ***

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	186053	647.7701	Strut Assembly Issue P/O : _____ Group Altech CAD PLATE IAW QQ-P-416F CLASS I TYPE II note: cad plate should not be too thick around tread	Firmed	-	11/23/18	6 pcs	0 pcs	6 pcs	\$7.818181/pcs	\$46.91
2	186250	646.3912	Shim Issue P/O: _____ Cat Plating, CAD PLATE PER QQ-P-416, TYPE II, CLASS 2, CL2	Firmed	-	11/23/18	40 pcs	0 pcs	40 pcs	\$16.568181/pcs	\$662.73
3	186251	647.7703	Strut Assembly Issue P/O : _____ Group Altech CAD PLATE IAW QQ-P-416F CLASS I TYPE II note: cad plate should not be too thick around tread	Firmed	-	11/23/18	20 pcs	0 pcs	20 pcs	\$16.568181/pcs	\$331.36

Grand Total: \$1,041.00

DAS
38
9-89



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041756

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/19/18 1:15 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(014543-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

014543 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courrier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
21-Nov-2018		Aman		041756 ✓				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	647.7701 ✓ Rev.	647.7701 CAD PLATE IAW QQ-P-416F CLASS 1 TYPE 2 CAD PLATE SHOULD NOT BE TO THICK AROUND TREAD	CADMIUM CH	6	6 ✓	0	0	0
2	646.3912 ✓ Rev.	646.3912 CAD YELLOW PLATE PER QQ-P-416 TYPE 2 CLASS 2	CADMIUM CH	40	40 ✓	0	0	0
3	647.7703 ✓ Rev.	647.7703 01 -CAD YELLOW 0.0005 THICK CAD PLATE IAW QQ-P-416F CLASS I TYPEII CAD PLATE SHOULD NOT BE TOO THICK AROUND TREAD MATERIAL STEEL BAKE	CADMIUM CH	20	20 ✓	0	0	0

 DAS
 38
 9-89

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

